

Layer (type)	Output Shape	Param #
input_1 (InputLayer)	(None, 1)	0
lambda_1 (Lambda)	(None, 512)	0
dense_1 (Dense)	(None, 128)	65664
dropout_1 (Dropout)	(None, 128)	0
dense_2 (Dense)	(None, 1)	129
Total params: 65,793		
Trainable params: 65,793		
Non-trainable params: 0		

Train on 120000 samples, validate on 20000 samples

```
Epoch 1/20
120000/120000 [=====] - 214s 2ms/step - loss: 0.3492 - acc: 0.8477 - val_loss: 0.3218 - val_acc: 0.8594
Epoch 2/20
120000/120000 [=====] - 209s 2ms/step - loss: 0.3183 - acc: 0.8614 - val_loss: 0.3091 - val_acc: 0.8658
Epoch 3/20
120000/120000 [=====] - 215s 2ms/step - loss: 0.3063 - acc: 0.8677 - val_loss: 0.2976 - val_acc: 0.8735
Epoch 4/20
120000/120000 [=====] - 212s 2ms/step - loss: 0.2965 - acc: 0.8721 - val_loss: 0.2927 - val_acc: 0.8754
Epoch 5/20
120000/120000 [=====] - 213s 2ms/step - loss: 0.2901 - acc: 0.8770 - val_loss: 0.2988 - val_acc: 0.8730
Epoch 6/20
120000/120000 [=====] - 206s 2ms/step - loss: 0.2830 - acc: 0.8803 - val_loss: 0.2808 - val_acc: 0.8823
Epoch 7/20
 50/120000 [.....] - ETA: 3:07 - loss: 0.2343 - acc: 0.9000C:\Users\shaggyday\AppData\Local\Programs\Python\Python37\lib\site-
packages\keras\callbacks.py:122: UserWarning: Method on_batch_end() is slow compared to the batch update (0.140881). Check your callbacks.
  % delta_t_median)
120000/120000 [=====] - 212s 2ms/step - loss: 0.2770 - acc: 0.8825 - val_loss: 0.2734 - val_acc: 0.8856
Epoch 8/20
120000/120000 [=====] - 212s 2ms/step - loss: 0.2710 - acc: 0.8859 - val_loss: 0.2701 - val_acc: 0.8864
Epoch 9/20
120000/120000 [=====] - 211s 2ms/step - loss: 0.2655 - acc: 0.8888 - val_loss: 0.2642 - val_acc: 0.8905
Epoch 10/20
120000/120000 [=====] - 203s 2ms/step - loss: 0.2595 - acc: 0.8918 - val_loss: 0.2605 - val_acc: 0.8923
Epoch 11/20
 50/120000 [.....] - ETA: 2:29 - loss: 0.2146 - acc: 0.8800C:\Users\shaggyday\AppData\Local\Programs\Python\Python37\lib\site-
packages\keras\callbacks.py:122: UserWarning: Method on_batch_end() is slow compared to the batch update (0.343933). Check your callbacks.
  % delta_t_median)
100/120000 [.....] - ETA: 9:59 - loss: 0.1947 - acc: 0.9100C:\Users\shaggyday\AppData\Local\Programs\Python\Python37\lib\site-
packages\keras\callbacks.py:122: UserWarning: Method on_batch_end() is slow compared to the batch update (0.171967). Check your callbacks.
  % delta_t_median)
120000/120000 [=====] - 211s 2ms/step - loss: 0.2551 - acc: 0.8938 - val_loss: 0.2609 - val_acc: 0.8911
Epoch 12/20
120000/120000 [=====] - 212s 2ms/step - loss: 0.2483 - acc: 0.8965 - val_loss: 0.2543 - val_acc: 0.8958
Epoch 13/20
120000/120000 [=====] - 211s 2ms/step - loss: 0.2441 - acc: 0.8992 - val_loss: 0.2493 - val_acc: 0.8979
Epoch 14/20
120000/120000 [=====] - 212s 2ms/step - loss: 0.2394 - acc: 0.9022 - val_loss: 0.2444 - val_acc: 0.9009
Epoch 15/20
120000/120000 [=====] - 210s 2ms/step - loss: 0.2346 - acc: 0.9036 - val_loss: 0.2434 - val_acc: 0.9010
Epoch 16/20
120000/120000 [=====] - 211s 2ms/step - loss: 0.2310 - acc: 0.9047 - val_loss: 0.2355 - val_acc: 0.9048
Epoch 17/20
120000/120000 [=====] - 211s 2ms/step - loss: 0.2261 - acc: 0.9077 - val_loss: 0.2339 - val_acc: 0.9059
Epoch 18/20
120000/120000 [=====] - 212s 2ms/step - loss: 0.2222 - acc: 0.9096 - val_loss: 0.2353 - val_acc: 0.9051
Epoch 19/20
120000/120000 [=====] - 211s 2ms/step - loss: 0.2185 - acc: 0.9111 - val_loss: 0.2326 - val_acc: 0.9042
Epoch 20/20
120000/120000 [=====] - 212s 2ms/step - loss: 0.2141 - acc: 0.9131 - val_loss: 0.2237 - val_acc: 0.9114
60000/60000 [=====] - 82s 1ms/step
```

Test score: 0.2272356588681539

Test accuracy: 0.9108333333333334

